

10/589561

1/59 IAP11 Rec'd PCT/PTO 16 AUG 2006

SEQUENCE LISTING

<110> FIVE PRIME THERAPEUTICS, INC.

<120> NOVEL APO2L AND IL-24 POLYPEPTIDES, POLYNUCLEOTIDES,
AND METHODS OF THEIR USE

<130> 8940-0037.00304

<140> PCT/US05/005221

<141> 2005-02-18

<150> 60/647,013

<151> 2005-01-27

<150> 60/546,385

<151> 2004-02-20

<160> 237

<170> PatentIn Ver. 3.3

<210> 1

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1

atgcagatgg ttgtgctccc ttgcctgggt tttaccctgc ttctctggag ccaggtatca 60
ggggcccaagg gccaagaatt ccacccctggg ccctgccaag tgaaggggggt tgttccccag 120
aaactgtggg aagccttcgt ggctgtggaa gacactatgc aagctcagga taacatcacg 180
agtggccggc tgctgcagca ggaggttctg cagaacgtct cgatgtcg gagctgttac 240
cttgccaca ccctgctggg gttctacttg aaaactgttt tcaaaaacta ccacaataga 300
acagttgaag tcaggactct gaagtcattc tctactctgg ccaacaactt tgttctcatc 360
gtgtcacaac tgcaacccag tcaagaaaaat gagatgtttt ccatcagaga cagtgcacac 420
aggcggtttc tgctattccg gagagcattc aaacagtgg acgtagaacg agctctgacc 480
aaagcccttg gggaaagtggc cattttctg acctggatgc agaaattcta caagctctga 540

<210> 2

<211> 621

<212> DNA

<213> Homo sapiens

<400> 2

atgaattttc aacagaggtt gcaaaggctg tggactttag ccagaccctt ctgcctctt 60
ttgtgtggca cagcctctca aatgcagatg ttgtgtctcc cttgcctggg ttttaccctg 120
cttctctggg gccaggtatc agggccccag ggccaagaat tccactttgg gcccgtccaa 180
gtgaaggggg ttgttccccca gaaactgtgg gaagccttct gggtgtgaa agacactatg 240
caagctcagg ataacatcac gagtgcggg ctgctgcage aggaggttct gcagaacgtc 300
tcggatgtcg agagctgtta ctttgtccac accctgtgg agtctactt gaaaactgtt 360
ttcaaaaactt accacaatacg aacagttgaa gtcaggactc tgaagtctt ctctactctg 420
gccaacaact ttgttctcat cgtgtcacaa ctgcaaccca gtcaagaaaa tgagatgttt 480
tccatcagag acagtgcaca caggcggtt ctgctattcc ggagagcatt caaacagtgg 540
gacgtagaag cagctctgac caaagccctt gggaaagtgg acattttctt gacctggatg 600
cagaaattctt acaagctctg a 621

<210> 3
<211> 381
<212> DNA
<213> Homo sapiens

<400> 3
atgcagatgg ttgtgtccc ttgcctgggt tttaccctgc ttctctggag ccaggtatca 60
ggggcccgagg gccaagaatt ccacttggg ccctgccaag tgaaggggggt tgccccccag 120
aaactgtggg aagccttcg ggctgtaaa gacactatgc aagctcagga taacatcacg 180
agtgcggc tgctgcagca ggaggttctg cagaacgtc cgcaagaaaa tgagatgttt 240
tccatcagag acagtgcaca caggcggtt ctgctattcc ggagagcatt caaacagttg 300
gacgtagaag cagctctgac caaagccctt gggaaagtgg acattttct gacctggatg 360
cagaatttct acaagctctg a 381

<210> 4
<211> 44
<212> DNA
<213> Homo sapiens

<400> 4
atgaattttc aacagaggtt gcaaaggctg tggacttttag ccag 44

<210> 5
<211> 159
<212> DNA
<213> Homo sapiens

<400> 5
gatgctgaga gctgttaccc tgcacacc ctgctggagt tctacttgaa aactgttttc 60
aaaaactacc acaatagaac agttaaatgc aggactctga agtcattctc tactctggcc 120
aacaactttg ttctcatcgt gtccacaactg caacccagt 159

<210> 6
<211> 179
<212> PRT
<213> Homo sapiens

<400> 6
Met Gln Met Val Val Leu Pro Cys Leu Gly Phe Thr Leu Leu Leu Trp
1 5 10 15

Ser Gln Val Ser Gly Ala Gln Gly Glu Phe His Phe Gly Pro Cys
20 25 30

Gln Val Lys Gly Val Val Pro Gln Lys Leu Trp Glu Ala Phe Trp Ala
35 40 45

Val Lys Asp Thr Met Gln Ala Gln Asp Asn Ile Thr Ser Ala Arg Leu
50 55 60

Leu Gln Gln Glu Val Leu Gln Asn Val Ser Asp Ala Glu Ser Cys Tyr
65 70 75 80

Leu Val His Thr Leu Leu Glu Phe Tyr Leu Lys Thr Val Phe Lys Asn
85 90 95

Tyr His Asn Arg Thr Val Glu Val Arg Thr Leu Lys Ser Phe Ser Thr
 100 105 110

Leu Ala Asn Asn Phe Val Leu Ile Val Ser Gln Leu Gln Pro Ser Gln
 115 120 125

Glu Asn Glu Met Phe Ser Ile Arg Asp Ser Ala His Arg Arg Phe Leu
 130 135 140

Leu Phe Arg Arg Ala Phe Lys Gln Leu Asp Val Glu Ala Ala Leu Thr
 145 150 155 160

Lys Ala Leu Gly Glu Val Asp Ile Leu Leu Thr Trp Met Gln Lys Phe
 165 170 175

Tyr Lys Leu

<210> 7
 <211> 206
 <212> PRT
 <213> Homo sapiens

<400> 7
 Met Asn Phe Gln Gln Arg Leu Gln Ser Leu Trp Thr Leu Ala Arg Pro
 1 5 10 15

Phe Cys Pro Pro Leu Leu Ala Thr Ala Ser Gln Met Gln Met Val Val
 20 25 30

Leu Pro Cys Leu Gly Phe Thr Leu Leu Leu Trp Ser Gln Val Ser Gly
 35 40 45

Ala Gln Gly Gln Glu Phe His Phe Gly Pro Cys Gln Val Lys Gly Val
 50 55 60

Val Pro Gln Lys Leu Trp Glu Ala Phe Trp Ala Val Lys Asp Thr Met
 65 70 75 80

Gln Ala Gln Asp Asn Ile Thr Ser Ala Arg Leu Leu Gln Gln Glu Val
 85 90 95

Leu Gln Asn Val Ser Asp Ala Glu Ser Cys Tyr Leu Val His Thr Leu
 100 105 110

Leu Glu Phe Tyr Leu Lys Thr Val Phe Lys Asn Tyr His Asn Arg Thr
 115 120 125

Val Glu Val Arg Thr Leu Lys Ser Phe Ser Thr Leu Ala Asn Asn Phe
 130 135 140

Val Leu Ile Val Ser Gln Leu Gln Pro Ser Gln Glu Asn Glu Met Phe
 145 150 155 160

Ser Ile Arg Asp Ser Ala His Arg Arg Phe Leu Leu Phe Arg Arg Ala
 165 170 175

Phe Lys Gln Leu Asp Val Glu Ala Ala Leu Thr Lys Ala Leu Gly Glu
 180 185 190

Val Asp Ile Leu Leu Thr Trp Met Gln Lys Phe Tyr Lys Leu
 195 200 205

<210> 8
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 8
 Met Gln Met Val Val Leu Pro Cys Leu Gly Phe Thr Leu Leu Leu Trp
 1 5 10 15

Ser Gln Val Ser Gly Ala Gln Gly Gln Glu Phe His Phe Gly Pro Cys
 20 25 30

Gln Val Lys Gly Val Val Pro Gln Lys Leu Trp Glu Ala Phe Trp Ala
 35 40 45

Val Lys Asp Thr Met Gln Ala Gln Asp Asn Ile Thr Ser Ala Arg Leu
 50 55 60

Leu Gln Gln Glu Val Leu Gln Asn Val Ser Gln Glu Asn Glu Met Phe
 65 70 75 80

Ser Ile Arg Asp Ser Ala His Arg Arg Phe Leu Leu Phe Arg Arg Ala
 85 90 95

Phe Lys Gln Leu Asp Val Glu Ala Ala Leu Thr Lys Ala Leu Gly Glu
 100 105 110

Val Asp Ile Leu Leu Thr Trp Met Gln Lys Phe Tyr Lys Leu
 115 120 125

<210> 9
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 9
 Met Asn Phe Gln Gln Arg Leu Gln Ser Leu Trp Thr Leu Ala
 1 5 10

<210> 10
 <211> 53
 <212> PRT
 <213> Homo sapiens

<400> 10
 Asp Ala Glu Ser Cys Tyr Leu Val His Thr Leu Leu Glu Phe Tyr Leu
 1 5 10 15

Lys Thr Val Phe Lys Asn Tyr His Asn Arg Thr Val Glu Val Arg Thr
 20 25 30

Leu Lys Ser Phe Ser Thr Leu Ala Asn Asn Phe Val Leu Ile Val Ser
 35 40 45

Gln Leu Gln Pro Ser
 50

<210> 11

<211> 807

<212> DNA

<213> Homo sapiens

<400> 11
 tgacactata gaccctggct tgccctgaaa cctttacttc taaaaatgact tccacgtctg 60
 ggacggaaac cttccaccca cagctatgcc tctgatttggt gaatggtaa ggtgcctgtc 120
 taacctttct gtaaaaaagaa ccagctgcct ccaggcagcc agccctcaag catcaattac 180
 aggaccagag cagacccttc tgccctcctt tgctggcgc acgcctctcaa atgcagatgg 240
 ttgtgtctcc ttgcctgggt ttacccctgc ttctctggag ccaggtatca gggggcccccagg 300
 gccaagaatt ccactttggg ccctgccaag tgaagggggt tggccccag aaactgtggg 360
 aagccttctg ggctgtgaaa gacactatgc aagctcagga taacatcacg agtgcggc 420
 tgctcagca ggaggttctg cagaacgtct cggatgtcga gagctgttac cttgtccaca 480
 ccctgtctga gttctacttg aaaactgttt tcaaaaaacta ccacaataga acagttaaag 540
 tcagactct gaagtcatc tctactctgg ccaacaactt tggcttcate gtgtcacaaac 600
 tgcaacccag tcaagaaaat gagatgtttt ccatcagaga cagtgcacac agggggtttc 660
 tgctattccg gagagcatc aaacagttgg acgtagaagc agctctgacc aaagcccttg 720
 gggaaagtggaa cattttctg acctggatgc agaaattcta caagctctga atgtcttagac 780
 caggacctcc ctccccctgg cactggg 807

<210> 12

<211> 1393

<212> DNA

<213> Homo sapiens

<400> 12
 cttgcctgca aacctttact tctgaaaatga cttccacggc tgggacggga accttccacc 60
 cacagctatg cctctgattt gtaatggtg aagggtgcctg tcttaactttt ctgtaaaaag 120
 aaccagctgc ctccaggccag ccagccctca agcatcaattt acaggaccag agggacaaga 180
 catgactgtg atgaggagct gcttcgcctt atttAACACC aagaagaattt gaggtgtctt 240
 gggaggaagg ccaggaggaa cacagactg agagatgaat tttcaacaga ggctgcaaag 300
 cctgtggact ttagccagac cttctgcctt ccctttgtctg ggcacagcctt ctcaaatgca 360
 gatgggttgtg ctcccttgcctt tgggttttac cctgtttctc tggagccagg tatcaggggc 420
 ccagggccaa gaattccact ttggccctgt ccaagtgaag ggggttggc cccagaaact 480
 gtgggaagcc ttctggctg taaaagacac tatgcaactt caggataaca tcacgagtgc 540
 ccggctgctg cagcaggagg ttctgcagaa cgtctcgat gctgagagct gttaccttgc 600
 ccacaccctg ctggaggctt acttggaaaac tggtttcaaa aactaccaca atagaacagt 660
 tgaagtctagg actctgaatg cattttctac tctggccaaac aactttgttc tcatgtgtc 720
 acaactgcaa cccagtcag aaaaatggat gttttccatc agagacagtg cacacaggcg 780
 gtttctgcta ttccggagag cattcaaaca gttggacgta gaagcagctc tgaccaaagc 840
 ccttggggaa gtggacattt ttctgacctg gatgcagaaa ttctacaagc tctgaatgtc 900
 tagaccagga cttccctccc cctggactg gtttggccc tggatgttcaaa caaacagttct 960
 cccttccttat gctgttcaact ggacacttca cggcccttggc catgggtccc attcttggcc 1020
 caggattatt gtcaaagaag tcattttta agcagcgtca gtgacagtca gggaaagggtgc 1080
 ctctggatgc tggatgttcaact gatgttcaacttca gattctgttca ttatttacaa ctctattaa 1140
 ttaatgtcag tatttcaacttca gatgttcaacttca gactgttcaacttca tacatgttcaacttca 1200

cagcagaata ttgtccccca tgcttctta cccctcacaa tcctgccac agtgtgggc 1260
 agtgatggg tgcttagaa gtacttaata aactgtggg ctttttgg cctgtcttg 1320
 gatttaaaa aaacagagag ggatgcttgg atgtaaaact gaacttcaga gcatgaaaat 1380
 cacactgtct gct 1393

<210> 13
 <211> 731
 <212> DNA
 <213> Homo sapiens

<400> 13
 tatagaacca ggcttgctg caaacctta ctcttgaat gacttccacg gctgggacgg 60
 gaaccttcca cccacagcta tgcctctgat tggtaatgg tgaagggtgcc tgcataactt 120
 ttctgtaaaa agaaccagct gcctccaggc agccagccct caagcatcac ttacaggacc 180
 agagcagacc cttctgcctt ccttgctgg cgacagcctc tcaaattgcag atggttgtgc 240
 tcccttgccct gggtttacc ctgtttctt ggagccaggt atcaggggcc cagggccaag 300
 aattccactt tggggccctgc caagtgaagg ggggtgtcc ccagaaactg tgggaagect 360
 tctgggctgt gaaagacact atgcaagctc aggataacat cacgagtgcc cggctgctgc 420
 agcaggaggt tctgcagaac gtctcgcaag aaaatgagat gtttccatc agagacagtg 480
 cacacaggcg gtttctgtt ttcggagag cattcaaaaca gttggacgta gaagcagctc 540
 tgaccaaagc ctttgggaa gtggacattc ttctgaccc gatgcagaaa ttctacaagc 600
 tctgaatgtc tagaccagga cctccctccc cctggcaactg gtttgcattt tgcattt 660
 caaacagtct cccttcattt gctgttcaact ggacacttca cgccttggc catgggccc 720
 attttggcc C 731

<210> 14
 <211> 708
 <212> DNA
 <213> Homo sapiens

<400> 14
 atggctatga tggaggtcca ggggggaccc agcctggac agacctgcgt gctgatcg 60
 atcttcacag tgctcctgca gtctctctgt gtggctgtaa ctacgtgtt ctttaccaac 120
 gagctgaagc agatgattt gagaacctct gaggaaacca tttctacagt tcaagaaaag 180
 caacaaaata tttctccctt agtgagagaa agaggtccctc agagagtgc agctcacata 240
 actgggacca gaggaaagaa caacacattt ttttctccaa actccaagaa taaaaggt 300
 ctggccgca aaataaaactc ctggaaatca tcaaggagtg ggcatttcatt cctgagcaac 360
 ttgacttga ggaatggta actggtcattt catgaaaaag gttttacta catctattcc 420
 caaacatact ttgatttca ggaggaaata aaagaaaaaca caaagaacga caaacaaatg 480
 gtccaatata tttacaaaata cacaaggat tctgaccctt tattgttgc gaaaagtgc 540
 agaaatagtt gttggctaa agatgcagaa tatggactctt atccatcta tcaaggggga 600
 atatttgagc ttaaggaaaa tgacagaatt tttgttctg taacaaatga gcaacttgata 660
 gacatggacc atgaagccag tttttcggg gccttttag ttggctaa 708

<210> 15
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 15
 Met Ala Met Met Glu Val Gln Gly Gly Pro Ser Leu Gly Gln Thr Cys
 1 5 10 15

Val Leu Ile Val Ile Phe Thr Val Leu Leu Gln Ser Leu Cys Val Ala
 20 25 30

Val Thr Tyr Val Tyr Phe Thr Asn Glu Leu Lys Gln Met Ile Leu Arg
 35 40 45
 Thr Ser Glu Glu Thr Ile Ser Thr Val Gln Glu Lys Gln Gln Asn Ile
 50 55 60
 Ser Pro Leu Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile
 65 70 75 80
 Thr Gly Thr Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys
 85 90 95
 Asn Glu Lys Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg
 100 105 110
 Ser Gly His Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu
 115 120 125
 Val Ile His Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe
 130 135 140
 Arg Phe Gln Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met
 145 150 155 160
 Val Gln Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu
 165 170 175
 Met Lys Ser Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly
 180 185 190
 Leu Tyr Ser Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp
 195 200 205
 Arg Ile Phe Val Ser Val Thr Asn Glu His Leu Ile Asp Met Asp His
 210 215 220
 Glu Ala Ser Phe Phe Gly Ala Phe Leu Val Gly
 225 230 235

<210> 16
 <211> 809
 <212> DNA
 <213> Homo sapiens

<400> 16
 gaccggctgc ctggctgact tacagcagtc agactctgac aggatcatgg ctatgtatgg 60
 ggtccagggg ggacccagcc tggcacagac ctgcgtctg atcgtatct tcacagtct 120
 cctgcagtct ctctgtgtgg ctgttaactt cgtgtacttt accaacgcgc tgaagcagat 180
 gattttgaga acctctgagg aaaccatttc tacagttcaa gaaaagcaac aaaatatttc 240
 tccccttagtg agagaaagag gtcctcagag agtagcagct cacataactg ggaccagagg 300
 aagaagcaac acattgtctt ctccaaactc caagaatgaa aaggctctgg gcccgc当地 360
 aaactcctgg gaatcatcaa ggagtgggca ttcatcctg agcaacttgc acttgaggaa 420
 tggtaactg gtcatccatg aaaaagggtt ttactacatc tattcccaa catactttcg 480
 atttcaggag gaaataaaag aaaacacaaa gaacgacaaa caaatggtc aatatattta 540
 caaatacaca agttatcctg acctatatt gttgatgaaa agtgctagaa atagttgttg 600
 gtctaaagat gcagaatatg gactctattc catctatcaa gggggaaatat ttgagcttaa 660

ggaaaatgac agaatttttgc ttctgttaac aaatgagcac ttgatagaca tggaccatga 720
 agccagtttt tcggggcct ttttagttgg ctaactgacc tggaaaagaaa aagcaataac 780
 ctcaaagtga ctattcagtt ttcaggatg 809

<210> 17
 <211> 570
 <212> DNA
 <213> Homo sapiens

<400> 17
 attttgagaa cctctgagga aaccatttct acagttcaag aaaagcaaca aaatatttct 60
 cccctagtga gagaagagg tcctcagaga gtagcagtc acataactgg gaccagagga 120
 agaagcaaca cattgtctc tccaaactcc aagaatgaaa aggctctgg ccgaaaaata 180
 aactcctggg aatcatcaag gagtgggcat tcattcctga gcaacttgca cttgaggaat 240
 ggtgaactgg tcatccatga aaaagggtt tactacatct attcccaaac atactttcga 300
 ttcaggagg aaataaaaaga aaacacaaaag aacgacaaac aaatggtcca atatatttac 360
 aaatacacaa gttatcctga ccctatattg ttgatgaaaa gtgctagaaa tagttgtgg 420
 tctaaagatg cagaatatgg actctattcc atctatcaag gggaaatatt tgagcttaag 480
 gaaaatgaca gaattttgtt ttctgttaaca aatgagcact tgatagacat ggaccatgaa 540
 gccagtttt tcggggcctt ttttagttggc 570

<210> 18
 <211> 588
 <212> DNA
 <213> Homo sapiens

<400> 18
 aacgagctga agcagatgat tttgagaacc tctgagggaaa ccatttctac agttcaagaa 60
 aagcaacaaa atatttctcc cctagtgaga gaaagaggtc ctcagagagt agcagctcac 120
 ataactggga ccagaggaag aagcaacaca ttgtcttctc caaactccaa gaatgaaaag 180
 gctctgggcc gcaaaataaa ctccctggaa tcatcaagga gtggcattc attcctgagc 240
 aacttgcact tgaggaatgg tgaactggc atccatgaaa aagggttttta ctacatctat 300
 tcccaaacat actttcgatt tcaggagggaa ataaaagaaaa acacaaaagaa cgacaaaacaa 360
 atggtccaat atatttacaa atacacaagt tatcctgacc ctatattgtt gatgaaaagt 420
 gctagaaata gttgttggc taaagatgca gaatatggac tctattccat ctatcaaggg 480
 ggaatatttgc agcttaagga aaatgacaga atttttgtt ctgtacaaaa tgagcacttg 540
 atagacatgg accatgaagc cagtttttc ggggccttt tagttgce 588

<210> 19
 <211> 846
 <212> DNA
 <213> Homo sapiens

<400> 19
 atggctatga tggaggtcca ggggggaccc agcctggac agacctgcgt gctgatcg 60
 atcttcacag tgctcctgca gtctctctgt gtggctgtaa cttacgtgtt ctttaccaac 120
 gagctgaagc agatgcagga caagtactcc aaaagtggca ttgcttggttt cttaaaagaa 180
 gatgacagttt attgggaccc caatgacgaa gägagtatga acagccccctg ctggcaagtc 240
 aagtggcaac tccgtcagct cgtagaaag atgatttga gaacctctga ggaaaccatt 300
 tctacagtcc aagaaaagca acaaataatt tctcccctag tgagagaaaag aggtcctcag 360
 agatgacgag ctcacataac tgggaccaga ggaagaagca acacattgtc ttctccaaac 420
 tccaagaatg aaaaggctct gggcccaaa ataaaactctt gggaatcatc aaggagtg 480
 cattcattcc ttagcaactt gcacttgagg aatggtgaac tggcatcca tgaaaaagg 540
 ttttactaca tctatccaa aacatactttt ctagttcagg agggaaataaa agaaaacaca 600
 agaaacgaca aacaaatggt ccaatataatt tacaatataca caagttatcc tgaccctata 660

ttgttcatga aaagtgcgt aaatagttgt tggctaaag atgcagaata tggacttat 720
 tccatctatc aaggggaaat atttgagctt aaggaaaatg acagaattt tgtttctgta 780
 acaaatgagc acttgataga catggaccat gaagccagtt ttttcggggc ctttttagtt 840
 ggctaa 846

<210> 20
 <211> 30
 <212> DNA
 <213> Homo sapiens

<400> 20 gagctgaagc agatgattt gagaacctct 30

<210> 21
 <211> 190
 <212> PRT
 <213> Homo sapiens

<400> 21
 Ile Leu Arg Thr Ser Glu Glu Thr Ile Ser Thr Val Gln Glu Lys Gln
 1 5 10 15

Gln Asn Ile Ser Pro Leu Val Arg Glu Arg Gly Pro Gln Arg Val Ala
 20 25 30

Ala His Ile Thr Gly Thr Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro
 35 40 45

Asn Ser Lys Asn Glu Lys Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu
 50 55 60

Ser Ser Arg Ser Gly His Ser Phe Leu Ser Asn Leu His Leu Arg Asn
 65 70 75 80

Gly Glu Leu Val Ile His Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln
 85 90 95

Thr Tyr Phe Arg Phe Gln Glu Ile Lys Glu Asn Thr Lys Asn Asp
 100 105 110

Lys Gln Met Val Gln Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro
 115 120 125

Ile Leu Leu Met Lys Ser Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala
 130 135 140

Glu Tyr Gly Leu Tyr Ser Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys
 145 150 155 160

Glu Asn Asp Arg Ile Phe Val Ser Val Thr Asn Glu His Leu Ile Asp
 165 170 175

Met Asp His Glu Ala Ser Phe Phe Gly Ala Phe Leu Val Gly
 180 185 190

10/59

<210> 22
<211> 196
<212> PRT
<213> Homo sapiens

<400> 22
Asn Glu Leu Lys Gln Met Ile Leu Arg Thr Ser Glu Glu Thr Ile Ser
1 5 10 15

Thr Val Gln Glu Lys Gln Gln Asn Ile Ser Pro Leu Val Arg Glu Arg
20 25 30

Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly Thr Arg Gly Arg Ser
35 40 45

Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu Lys Ala Leu Gly Arg
50 55 60

Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly His Ser Phe Leu Ser
65 70 75 80

Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile His Glu Lys Gly Phe
85 90 95

Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln Glu Ile Lys
100 105 110

Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln Tyr Ile Tyr Lys Tyr
115 120 125

Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys Ser Ala Arg Asn Ser
130 135 140

Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr Ser Ile Tyr Gln Gly
145 150 155 160

Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile Phe Val Ser Val Thr
165 170 175

Asn Glu His Leu Ile Asp Met Asp His Glu Ala Ser Phe Phe Gly Ala
180 185 190

Phe Leu Val Gly
195

<210> 23
<211> 281
<212> PRT
<213> Homo sapiens

<400> 23
Met Ala Met Met Glu Val Gln Gly Gly Pro Ser Leu Gly Gln Thr Cys
1 5 10 15

Val Leu Ile Val Ile Phe Thr Val Leu Leu Gln Ser Leu Cys Val Ala
20 25 30

11/59

Val Thr Tyr Val Tyr Phe Thr Asn Glu Leu Lys Gln Met Gln Asp Lys
35 40 45

Tyr Ser Lys Ser Gly Ile Ala Cys Phe Leu Lys Glu Asp Asp Ser Tyr
50 55 60

Trp Asp Pro Asn Asp Glu Glu Ser Met Asn Ser Pro Cys Trp Gln Val
65 70 75 80

Lys Trp Gln Leu Arg Gln Leu Val Arg Lys Met Ile Leu Arg Thr Ser
85 90 95

Glu Glu Thr Ile Ser Thr Val Gln Glu Lys Gln Gln Asn Ile Ser Pro
100 105 110

Leu Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly
115 120 125

Thr Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu
130 135 140

Lys Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly
145 150 155 160

His Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile
165 170 175

His Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe
180 185 190

Gln Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln
195 200 205

Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys
210 215 220

Ser Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr
225 230 235 240

Ser Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile
245 250 255

Phe Val Ser Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala
260 265 270

Ser Phe Phe Gly Ala Phe Leu Val Gly
275 280

<210> 24

<211> 10

<212> PRT

<213> Homo sapiens

<400> 24

Glu Leu Lys Gln Met Ile Leu Arg Thr Ser

1

5

10

<210> 25
<211> 1776
<212> DNA
<213> Homo sapiens

<400> 25

| | | |
|-------------|--|------|
| tttcatttcc | tcactgacta taaaagaata gagaaggaag ggcttcagtgc accggctgcc | 60 |
| tggctgactt | acagcagtca gactctgaca ggtatcatgac tatgtatggag gtccaggggg | 120 |
| gaccgcct | gggacagacc tgctgtctga tcgtatctt cacagtgttc ctgcagtctc | 180 |
| tctgttgtcc | tgttaacttac gtgtacttta ccaacgagct gaagcagatg caggacaagt | 240 |
| actccaaaag | tggcattgtc tgtttcttaa aagaagatga tagtattgg gaccccata | 300 |
| acgaagagag | tatgaacagc ccctgttgc aagtcaagtg gcaactccgt cagctcgta | 360 |
| gaaagatgt | tttgagaacc tctgaggaaa ccatttctac agtcaagaa aagcaacaaa | 420 |
| atatttctcc | cctagtgaga gaaagaggc ctcagagatc agcagcttac ataactggaa | 480 |
| ccagaggaag | aagcaacaca ttgtcttctc caaactccaa gaataaaaag gctctggcc | 540 |
| gcaaaaataaa | ctcctggaaa tcatcaagga gtgggcattc attcctgagc aacttgcact | 600 |
| tgaggaatgg | tgaactggc atccatgaaa aagggtttt ctacatctat tcccaaacat | 660 |
| actttcgatt | tcaggaggaa ataaaaagaaa acacaaagaa cgacaaacaa atggtccaat | 720 |
| atatttacaa | atacacaagt tattctgacc ctatattgtt gataaaaagt gctagaata | 780 |
| gttgttgtc | taaagatgca gaatatggac tctattccat ctatcaaggg ggaatatttgc | 840 |
| agcttaagga | aatatgacaga atttttgtt ctgtacaaa tgagcacattg atagacatgg | 900 |
| accatgaagc | cagtttttc ggggccttt tagttggcta actgacattg aaagaaaaag | 960 |
| caataacctc | aaagtgacta ttctatggc aggtatgatc actatgaa tgtttcaaaa | 1020 |
| aatctgacca | aaacaaacaa acagaaaaaca gaaaacaaa aaacctctat gcaatctgag | 1080 |
| tagagcagcc | acaacccaaa aattctacaa cacacactgt tctgaaatgt actcacttat | 1140 |
| cccaagagaa | tgttttttgc gaaagatctt tcaggactt acctcatc agtttgcctag | 1200 |
| cagaatctt | gaagactgtc agttccaaa cattaatgca atggtaaca tcttctgtct | 1260 |
| ttataatctt | ctccttgtaa agactgttaga agaaagagca caatccatc tctcaagtag | 1320 |
| tgtatcacag | tagtagccctt caggtttccat taagggacaa catcttaag taaaagaga | 1380 |
| gaagagggcac | cactaaaaaa tcgcagtttgc cctggcgcac tggctcacac ctgtatccc | 1440 |
| aacattttgg | gaacccaaagg tgggttagatc acgagatcaa gagatcaaga ccatactgac | 1500 |
| caacatagtg | aaacccccatc tctactgaaa gtacaaaaat tagtgggtg tggcaca | 1560 |
| tgcctgttagt | cccagctact tgagaggctg aggcaagaga atttttgc cccggggaggc | 1620 |
| agaggttgca | gtgtggtagatc atcatgccac tacactccat cctggcgcaca gagcgagact | 1680 |
| tggttcaaa | aaaaaaaaaaa aaaaaaaaaactt cagtaagtagc gtgttatttt tttcaataaaa | 1740 |
| attctattac | agtatgtcaa aaaaaaaaaaaa aaaaaaa | 1776 |

<210> 26
<211> 23
<212> PRT
<213> Homo sapiens

<400> 26

| | | |
|---|---|----|
| Met Lys Thr Cys Trp Lys Ile Pro Val Phe Phe Phe Val Cys Ser Phe | | |
| 1 | 5 | 10 |
| Leu Glu Pro Trp Ala Ser Ala | | 15 |
| 20 | | |

<210> 27
<211> 17
<212> PRT
<213> Homo sapiens

<400> 27
Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser Cys Leu Gln
1 5 10 15

Gly

<210> 28
<211> 13
<212> PRT
<213> Homo sapiens

<400> 28
Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser
1 5 10

<210> 29
<211> 19
<212> PRT
<213> Homo sapiens

<400> 29
Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser Cys Leu Gln
1 5 10 15

Gly Pro Cys

<210> 30
<211> 16
<212> PRT
<213> Homo sapiens

<400> 30
Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser Cys Leu Gln
1 5 10 15

<210> 31
<211> 15
<212> PRT
<213> Homo sapiens

<400> 31
Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser Cys Leu
1 5 10 15

<210> 32
<211> 30
<212> PRT
<213> Homo sapiens

<400> 32
 Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu
 20 25 30

<210> 33

<211> 25

<212> PRT

<213> Homo sapiens

<400> 33

Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu
 20 25

<210> 34

<211> 33

<212> PRT

<213> Homo sapiens

<400> 34

Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu Gly Pro
 20 25 30

Ser

<210> 35

<211> 24

<212> PRT

<213> Homo sapiens

<400> 35

Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu
 20

<210> 36

<211> 26

<212> PRT

<213> Homo sapiens

<400> 36

Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu Pro
20 25

<210> 37
<211> 32
<212> PRT
<213> Homo sapiens

<400> 37
Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Pro
1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu Gly Pro
20 25 30

<210> 38
<211> 27
<212> PRT
<213> Homo sapiens

<400> 38
Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Pro
1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Pro Ala
20 25

<210> 39
<211> 23
<212> PRT
<213> Homo sapiens

<400> 39
Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Pro
1 5 10 15

Leu Leu Leu Leu Leu Leu
20

<210> 40
<211> 35
<212> PRT
<213> Homo sapiens

<400> 40
Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Pro
1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu Gly Pro
20 25 30

Ser Gln Ala
35

<210> 41
<211> 24
<212> PRT
<213> Homo sapiens

<400> 41
Met Arg Arg Met Trp Ala Thr Gln Gly Leu Ala Val Ala Leu
1 5 10 15

Ser Val Leu Pro Gly Ser Arg Ala
20

<210> 42
<211> 21
<212> PRT
<213> Homo sapiens

<400> 42
Met Arg Arg Met Trp Ala Thr Gln Gly Leu Ala Val Ala Leu
1 5 10 15

Ser Val Leu Pro Gly
20

<210> 43
<211> 19
<212> PRT
<213> Homo sapiens

<400> 43
Met Asp Leu Arg Gln Phe Leu Met Cys Leu Ser Leu Cys Thr Ala Phe
1 5 10 15

Ala Leu Ser

<210> 44
<211> 15
<212> PRT
<213> Homo sapiens

<400> 44
Met Asp Leu Arg Gln Phe Leu Met Cys Leu Ser Leu Cys Thr Ala
1 5 10 15

<210> 45
<211> 17
<212> PRT
<213> Homo sapiens

17/59

<400> 45
Met Asp Leu Arg Gln Phe Leu Met Cys Leu Ser Leu Cys Thr Ala Phe
1 5 10 15

Ala

<210> 46
<211> 23
<212> PRT
<213> Homo sapiens

<400> 46
Met Lys Thr Cys Trp Lys Ile Pro Val Phe Phe Val Cys Ser Phe
1 5 10 15
Leu Glu Pro Trp Ala Ser Ala
20

<210> 47
<211> 21
<212> PRT
<213> Homo sapiens

<400> 47
Met Met Leu Arg Val Leu Val Gly Ala Val Leu Pro Ala Met Leu Leu
1 5 10 15
Ala Ala Pro Pro Pro
20

<210> 48
<211> 17
<212> PRT
<213> Homo sapiens

<400> 48
Met Met Leu Arg Val Leu Val Gly Ala Val Leu Pro Ala Met Leu Leu
1 5 10 15

Ala

<210> 49
<211> 19
<212> PRT
<213> Homo sapiens

<400> 49
Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Gly Ala Trp Ala
1 5 10 15

Ile Pro Gly

<210> 50
<211> 22
<212> PRT
<213> Homo sapiens

<400> 50 Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Gly Ala Trp Ala
1 5 10 15
Ile Pro Gly Gly Leu Gly
20

<210> 51
<211> 18
<212> PRT
<213> Homo sapiens

<400> 51 Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Gly Ala Trp Ala
1 5 10 15

Ile Pro

<210> 52
<211> 16
<212> PRT
<213> *Homo sapiens*

<400> 52 Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala Trp Ala
1 5 10 15

<210> 53
<211> 14
<212> PRT
<213> *Homo sapiens*

<400> 53 Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala
1 . 5 . 10

<210> 54
<211> 20
<212> PRT
<213> Homo sapiens

<400> 54 Met Ser Met Leu Val Val Phe Leu Leu Leu Trp Gly Val Thr Trp Gly
15 5 10 15

Pro Val Thr Glu
20

<210> 55
<211> 16
<212> PRT
<213> Homo sapiens

<400> 55
Met Ser Met Leu Val Val Phe Leu Leu Trp Gly Val Thr Trp Gly
1 5 10 15

<210> 56
<211> 21
<212> PRT
<213> Homo sapiens

<400> 56
Met Ser Met Leu Val Val Phe Leu Leu Trp Gly Val Thr Trp Gly
1 5 10 15

Pro Val Thr Glu Ala
20

<210> 57
<211> 24
<212> PRT
<213> Homo sapiens

<400> 57
Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu
1 5 10 15

Leu Ala Ala Leu Leu Glu Ala Ala
20

<210> 58
<211> 20
<212> PRT
<213> Homo sapiens

<400> 58
Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu
1 5 10 15

Leu Ala Ala Leu
20

<210> 59
<211> 26
<212> PRT
<213> Homo sapiens

20/59

<400> 59

Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu
1 5 10 15

Leu Ala Ala Leu Leu Glu Ala Ala Leu Gly
20 25

<210> 60

<211> 21

<212> PRT

<213> Homo sapiens

<400> 60

Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu
1 5 10 15

Leu Ala Ala Leu Leu
20

<210> 61

<211> 23

<212> PRT

<213> Homo sapiens

<400> 61

Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu
1 5 10 15

Leu Ala Ala Leu Leu Glu Ala
20

<210> 62

<211> 24

<212> PRT

<213> Homo sapiens

<400> 62

Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu
1 5 10 15

Ala Ala Ala Ala Leu Ala Glu Gly
20

<210> 63

<211> 19

<212> PRT

<213> Homo sapiens

<400> 63

Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu
1 5 10 15

Ala Ala Ala

<210> 64
<211> 22
<212> PRT
<213> Homo sapiens

<400> 64
Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu
1 5 10 15
Ala Ala Ala Ala Leu Ala
20

<210> 65
<211> 20
<212> PRT
<213> Homo sapiens

<400> 65
Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu
1 5 10 15
Ala Ala Ala Ala
20

<210> 66
<211> 26
<212> PRT
<213> Homo sapiens

<400> 66
Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu
1 5 10 15
Ala Ala Ala Ala Leu Ala Glu Gly Asp Ala
20 25

<210> 67
<211> 21
<212> PRT
<213> Homo sapiens

<400> 67
Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu
1 5 10 15
Ala Ala Ala Ala Leu
20

<210> 68
<211> 24
<212> PRT
<213> Homo sapiens

<400> 68
 Met Arg Leu Arg Arg Leu Ala Leu Phe Pro Gly Val Ala Leu Leu Leu
 1 5 10 15
 Ala Ala Gly Arg Leu Val Ala Ala
 20

<210> 69
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 69
 Met Arg Leu Arg Arg Leu Ala Leu Phe Pro Gly Val Ala Leu Leu Leu
 1 5 10 15
 Ala Ala Gly Arg Leu Val Ala
 20

<210> 70
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 70
 Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Ala Gly Leu Cys
 1 5 10 15
 Cys Leu Val Pro Val Ser Leu Ala
 20

<210> 71
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 71
 Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Ala Gly Leu Cys
 1 5 10 15

Cys Leu

<210> 72
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 72
 Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Ala Gly Leu Cys
 1 5 10 15

Cys Leu Val Pro Val Ser Leu
20

<210> 73
<211> 17
<212> PRT
<213> Homo sapiens

<400> 73
Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Leu Ala Gly Leu Cys
1 5 10 15

Cys

<210> 74
<211> 23
<212> PRT
<213> Homo sapiens

<400> 74
Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu
1 5 10 15
Leu Ala Thr Pro Ala Gln Ala
20

<210> 75
<211> 18
<212> PRT
<213> Homo sapiens

<400> 75
Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu
1 5 10 15

Leu Ala

<210> 76
<211> 25
<212> PRT
<213> Homo sapiens

<400> 76
Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu
1 5 10 15
Leu Ala Thr Pro Ala Gln Ala His Leu
20 25

<210> 77
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 77
 Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu
 1 5 10 15

Leu Ala Thr Pro
 20

<210> 78
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 78
 Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu
 1 5 10 15

Leu Ala Thr Pro Ala
 20

<210> 79
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 79
 Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly
 1 5 10 15

Leu Leu Leu Gly Glu Ser
 20

<210> 80
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 80
 Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly
 1 5 10 15

Leu Leu Leu

<210> 81
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 81
Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly
1 5 10 15

Leu Leu Leu Leu
20

<210> 82
<211> 15
<212> PRT
<213> Homo sapiens

<400> 82
Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala
1 5 10 15

<210> 83
<211> 21
<212> PRT
<213> Homo sapiens

<400> 83
Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly
1 5 10 15

Leu Leu Leu Leu Gly
20

<210> 84
<211> 17
<212> PRT
<213> Homo sapiens

<400> 84
Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly
1 5 10 15

Leu

<210> 85
<211> 18
<212> PRT
<213> Homo sapiens

<400> 85
Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala
1 5 10 15

Ile Pro

26/59

<210> 86
<211> 16
<212> PRT
<213> Homo sapiens

<400> 86
Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala
1 5 10 15

<210> 87
<211> 15
<212> PRT
<213> Homo sapiens

<400> 87
Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys
1 5 10 15

<210> 88
<211> 16
<212> PRT
<213> Homo sapiens

<400> 88
Met Lys Arg Val Leu Val Leu Leu Ala Val Ala Phe Gly His Ala
1 5 10 15

<210> 89
<211> 14
<212> PRT
<213> Homo sapiens

<400> 89
Met Lys Arg Val Leu Val Leu Leu Ala Val Ala Phe Gly
1 5 10

<210> 90
<211> 25
<212> PRT
<213> Homo sapiens

<400> 90
Met Asn Ser Phe Ser Thr Ser Ala Phe Gly Pro Val Ala Phe Ser Leu
1 5 10 15

Gly Leu Leu Leu Val Leu Pro Ala Ala
20 25

<210> 91
<211> 24
<212> PRT
<213> Homo sapiens

27/59

<400> 91
Met Asn Ser Phe Ser Thr Ser Ala Phe Gly Pro Val Ala Phe Ser Leu
1 5 10 15

Gly Leu Leu Leu Val Leu Pro Ala
20

<210> 92

<211> 27

<212> PRT

<213> Homo sapiens

<400> 92

Met Asn Ser Phe Ser Thr Ser Ala Phe Gly Pro Val Ala Phe Ser Leu
1 5 10 15

Gly Leu Leu Leu Val Leu Pro Ala Ala Phe Pro
20 25

<210> 93

<211> 18

<212> PRT

<213> Homo sapiens

<400> 93

Met Ala Leu Ser Trp Val Leu Thr Val Leu Ser Leu Leu Pro Leu Leu
1 5 10 15

Glu Ala

<210> 94

<211> 19

<212> PRT

<213> Homo sapiens

<400> 94

Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu
1 5 10 15

Cys Trp Ser

<210> 95

<211> 25

<212> PRT

<213> Homo sapiens

<400> 95

Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu
1 5 10 15

Cys Trp Ser Leu Ala Ile Ala Thr Pro
20 25

<210> 96
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 96
 Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu
 1 5 10 15
 Cys Trp Ser Leu Ala
 20

<210> 97
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 97
 Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu
 1 5 10 15
 Cys Trp Ser Leu Ala Ile Ala
 20

<210> 98
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 98
 Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu
 1 5 10 15
 Cys Trp Ser Leu Ala Ile Ala Thr Pro Leu Pro Pro Thr Ser Ala
 20 25 30

<210> 99
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 99
 Met Asp Tyr Tyr Arg Lys Tyr Ala Ala Ile Phe Leu Val Thr Leu Ser
 1 5 10 15
 Val Phe Leu His Val Leu His Ser Ala Pro
 20 25

<210> 100
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 100
 Met Asp Tyr Tyr Arg Lys Tyr Ala Ala Ile Phe Leu Val Thr Leu Ser
 1 5 10 15

Val Phe Leu His Val Leu His Ser
 20

<210> 101

<211> 18

<212> PRT

<213> Homo sapiens

<400> 101
 Met Lys Leu Ile Thr Ile Leu Phe Leu Cys Ser Arg Leu Leu Leu Ser
 1 5 10 15

Leu Thr

<210> 102

<211> 19

<212> PRT

<213> Homo sapiens

<400> 102
 Met Lys Leu Ile Thr Ile Leu Phe Leu Cys Ser Arg Leu Leu Leu Ser
 1 5 10 15

Leu Thr Gln

<210> 103

<211> 16

<212> PRT

<213> Homo sapiens

<400> 103
 Met Lys Leu Ile Thr Ile Leu Phe Leu Cys Ser Arg Leu Leu Leu Ser
 1 5 10 15

<210> 104

<211> 23

<212> PRT

<213> Homo sapiens

<400> 104
 Met Lys Leu Ile Thr Ile Leu Phe Leu Cys Ser Arg Leu Leu Leu Ser
 1 5 10 15

Leu Thr Gln Glu Ser Gln Ser
 20

<210> 105
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 105
 Met Leu Arg Arg Ala Leu Leu Cys Leu Ala Val Ala Ala Leu Val Arg
 1 5 10 15

Ala

<210> 106
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 106
 Met Pro Arg Ser Cys Cys Ser Arg Ser Gly Ala Leu Leu Leu Ala Leu
 1 5 10 15

Leu Leu Gln Ala Ser Met Glu
 20

<210> 107
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 107
 Met Pro Arg Ser Cys Cys Ser Arg Ser Gly Ala Leu Leu Leu Ala Leu
 1 5 10 15

Leu Leu Gln Ala Ser Met Glu Val Arg Gly
 20 25

<210> 108
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 108
 Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val
 1 5 10 15

Leu Gly Asp Leu Gln Ala Ala
 20

<210> 109
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 109
 Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val
 1 5 10 15

Leu Gly ASP Leu Gln Ala
 20

<210> 110

<211> 18

<212> PRT

<213> Homo sapiens

<400> 110
 Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val
 1 5 10 15

Leu Gly

<210> 111

<211> 18

<212> PRT

<213> Homo sapiens

<400> 111
 Met Val Arg Met Val Pro Val Leu Leu Ser Leu Leu Leu Leu Gly
 1 5 10 15

Pro Ala

<210> 112

<211> 20

<212> PRT

<213> Homo sapiens

<400> 112
 Met Val Arg Met Val Pro Val Leu Leu Ser Leu Leu Leu Leu Gly
 1 5 10 15

Pro Ala Val Pro
 20

<210> 113

<211> 21

<212> PRT

<213> Homo sapiens

<400> 113
 Met Val Arg Met Val Pro Val Leu Leu Ser Leu Leu Leu Leu Gly
 1 5 10 15

Pro Ala Val Pro Gln
 20

<210> 114
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 114
 Met Val Arg Met Val Pro Val Leu Leu Ser Leu Leu Leu Leu Gly
 1 5 10 15

Pro

<210> 115
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 115
 Met Arg Ser Ala Ala Val Leu Ala Leu Leu Cys Ala Gly Gln Val
 1 5 10 15

Thr Ala

<210> 116
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 116
 Met Arg Ser Ala Ala Val Leu Ala Leu Leu Cys Ala Gly Gln
 1 5 10 15

<210> 117
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 117
 Met Arg Ser Ala Ala Val Leu Ala Leu Leu Cys Ala Gly
 1 5 10

<210> 118
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 118
 Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala
 1 5 10 15

Phe Cys Leu Leu Ala Leu Pro Arg Asp Ala
20 25

<210> 119
<211> 18
<212> PRT
<213> Homo sapiens

<400> 119
Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala
1 5 10 15

Phe Cys

<210> 120
<211> 20
<212> PRT
<213> Homo sapiens

<400> 120
Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala
1 5 10 15

Phe Cys Leu Leu
20

<210> 121
<211> 28
<212> PRT
<213> Homo sapiens

<400> 121
Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala
1 5 10 15

Phe Cys Leu Leu Ala Leu Pro Arg Asp Ala Arg Ala
20 25

<210> 122
<211> 21
<212> PRT
<213> Homo sapiens

<400> 122
Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala
1 5 10 15

Phe Cys Leu Leu Ala
20

<210> 123

<211> 23

<212> PRT

<213> Homo sapiens

<400> 123

Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala
1 5 10 15Phe Cys Leu Leu Ala Leu Pro
20

<210> 124

<211> 22

<212> PRT

<213> Homo sapiens

<400> 124

Met Met Lys Thr Leu Leu Leu Phe Val Gly Leu Leu Leu Thr Trp Glu
1 5 10 15Ser Gly Gln Val Leu Gly
20

<210> 125

<211> 18

<212> PRT

<213> Homo sapiens

<400> 125

Met Met Lys Thr Leu Leu Leu Phe Val Gly Leu Leu Leu Thr Trp Glu
1 5 10 15

Ser Gly

<210> 126

<211> 14

<212> PRT

<213> Homo sapiens

<400> 126

Met Met Lys Thr Leu Leu Leu Phe Val Gly Leu Leu Leu Thr
1 5 10

<210> 127

<211> 24

<212> PRT

<213> Homo sapiens

<400> 127

Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu
1 5 10 15

Val Ser Leu Leu Ile Leu Gln Ala
20

<210> 128
<211> 29
<212> PRT
<213> Homo sapiens

<400> 128
Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu
1 5 10 15

Val Ser Leu Leu Ile Leu Gln Ala Met Pro Ala Leu Gly
20 25

<210> 129
<211> 30
<212> PRT
<213> Homo sapiens

<400> 129
Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu
1 5 10 15

Val Ser Leu Leu Ile Leu Gln Ala Met Pro Ala Leu Gly Ser
20 25 30

<210> 130
<211> 23
<212> PRT
<213> Homo sapiens

<400> 130
Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu
1 5 10 15

Val Ser Leu Leu Ile Leu Gln
20

<210> 131
<211> 31
<212> PRT
<213> Homo sapiens

<400> 131
Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu
1 5 10 15

Val Ser Leu Leu Ile Leu Gln Ala Met Pro Ala Leu Gly Ser Ala
20 25 30

<210> 132
<211> 22
<212> PRT
<213> Homo sapiens

<400> 132
Met Lys Val Leu Ala Ala Gly Val Val Pro Leu Leu Leu Val Leu His
1 5 10 15
Trp Lys His Gly Ala Gly
20

<210> 133
<211> 23
<212> PRT
<213> Homo sapiens

<400> 133
Met Lys Val Leu Ala Ala Gly Val Val Pro Leu Leu Leu Val Leu His
1 5 10 15
Trp Lys His Gly Ala Gly Ser
20

<210> 134
<211> 18
<212> PRT
<213> Homo sapiens

<400> 134
Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr
1 5 10 15
Ser Gly

<210> 135
<211> 15
<212> PRT
<213> Homo sapiens

<400> 135
Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly
1 5 10 15

<210> 136
<211> 17
<212> PRT
<213> Homo sapiens

<400> 136
Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr
1 5 10 15

Ser

<210> 137
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 137
 Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly
 5 10
 1

<210> 138
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 138
 Met Lys Leu Leu Met Val Leu Met Leu Ala Ala Leu Ser Gln His Cys
 5 10 15
 1

Tyr Ala

<210> 139
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 139
 Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu
 5 10 15
 1
 Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly Gln Val Ala
 20 25 30

<210> 140
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 140
 Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu
 5 10 15
 1
 Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly Gln Val Ala Ala Thr
 20 25 30

<210> 141
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 141
 Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu
 1 5 10 15

Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly Gln
 20 25

<210> 142

<211> 27

<212> PRT

<213> Homo sapiens

<400> 142

Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu
 1 5 10 15

Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly
 20 25

<210> 143

<211> 31

<212> PRT

<213> Homo sapiens

<400> 143

Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu
 1 5 10 15

Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly Gln Val Ala Ala
 20 25 30

<210> 144

<211> 26

<212> PRT

<213> Homo sapiens

<400> 144

Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu
 1 5 10 15

Leu Leu Ala Leu Val Leu Ala Pro Arg Val
 20 25

<210> 145

<211> 22

<212> PRT

<213> Homo sapiens

<400> 145

Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu
 1 5 10 15

Leu Leu Ala Leu Val Leu
20

<210> 146
<211> 29
<212> PRT
<213> Homo sapiens

<400> 146
Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu
1 5 10 15

Leu Leu Ala Leu Val Leu Ala Pro Arg Val Leu Arg Ala
20 25

<210> 147
<211> 24
<212> PRT
<213> Homo sapiens

<400> 147
Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu
1 5 10 15

Leu Leu Ala Leu Val Leu Ala Pro
20

<210> 148
<211> 23
<212> PRT
<213> Homo sapiens

<400> 148
Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu
1 5 10 15

Leu Leu Ala Leu Val Leu Ala
20

<210> 149
<211> 25
<212> PRT
<213> Homo sapiens

<400> 149
Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Cys
1 5 10 15

Ala Ala Ala Ala Gly Ala Gly Lys Ala
20 25

<210> 150
<211> 19
<212> PRT
<213> Homo sapiens

<400> 150
Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Cys
1 5 10 15

Ala Ala Ala

<210> 151
<211> 22
<212> PRT
<213> Homo sapiens

<400> 151
Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Cys
1 5 10 15

Ala Ala Ala Ala Gly Ala
20

<210> 152
<211> 18
<212> PRT
<213> Homo sapiens

<400> 152
Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Cys
1 5 10 15

Ala Ala

<210> 153
<211> 20
<212> PRT
<213> Homo sapiens

<400> 153
Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Cys
1 5 10 15

Ala Ala Ala Ala
20

<210> 154
<211> 21
<212> PRT
<213> Homo sapiens

<400> 154
 Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Leu Cys
 1 5 10 15

Ala Ala Ala Ala Gly
 20

<210> 155
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 155
 Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Leu Cys
 1 5 10 15

Ala Ala Ala Ala Gly Ala Gly
 20

<210> 156
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 156
 Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala
 1 5 10 15

Gly Thr Ser

<210> 157
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 157
 Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala
 1 5 10 15

Gly Thr

<210> 158
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 158
 Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala
 1 5 10 15

Gly Thr Ser Thr
 20

<210> 159
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 159
 Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala
 1 5 10 15
 Gly Thr Ser Thr Gln Thr Gln Ser
 20

<210> 160
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 160
 Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala
 1 5 10 15

<210> 161
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 161
 Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala
 1 5 10 15

Gly

<210> 162
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 162
 Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala
 1 5 10

<210> 163
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 163
 Met His Leu Leu Leu Phe Gln Leu Leu Val Leu Leu Pro Leu Gly Lys
 1 5 10 15

Thr

<210> 164
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 164
 Met Pro Leu Gly Leu Leu Trp Leu Gly Leu Ala Leu Leu Gly Ala Leu
 5 10 15
 1

His Ala

<210> 165
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 165
 Met Pro Leu Gly Leu Leu Trp Leu Gly Leu Ala Leu Leu Gly Ala Leu
 5 10 15
 1

His Ala Gln Ala
 20

<210> 166
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 166
 Met Pro Leu Gly Leu Leu Trp Leu Gly Leu Ala Leu Leu Gly Ala
 5 10 15
 1

<210> 167
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 167
 Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu
 5 10 15
 1

Leu Cys Ala His Val Val Thr Leu Leu Val Arg Ala Thr
 20 25

<210> 168
 <211> 24
 <212> PRT
 <213> Homo sapiens

<210> 173
<211> 15
<212> PRT
<213> Homo sapiens

<400> 173
Met Thr Ser Ile Leu Thr Val Leu Ile Cys Leu Gly Leu Ser Leu
1 5 10 15

<210> 174
<211> 26
<212> PRT
<213> Homo sapiens

<400> 174
Met Glu Asn Pro Ser Pro Ala Ala Leu Gly Lys Ala Leu Cys Ala
1 5 10 15
Leu Leu Leu Ala Thr Leu Gly Ala Ala Gly
20 25

<210> 175
<211> 25
<212> PRT
<213> Homo sapiens

<400> 175
Met Glu Asn Pro Ser Pro Ala Ala Leu Gly Lys Ala Leu Cys Ala
1 5 10 15
Leu Leu Leu Ala Thr Leu Gly Ala Ala
20 25

<210> 176
<211> 24
<212> PRT
<213> Homo sapiens

<400> 176
Met Glu Asn Pro Ser Pro Ala Ala Leu Gly Lys Ala Leu Cys Ala
1 5 10 15
Leu Leu Leu Ala Thr Leu Gly Ala
20

<210> 177
<211> 28
<212> PRT
<213> Homo sapiens

<400> 177
Met Glu Asn Pro Ser Pro Ala Ala Ala Leu Gly Lys Ala Leu Cys Ala
1 5 10 15

Leu Leu Leu Ala Thr Leu Gly Ala Ala Gly Gln Pro
20 25

<210> 178

<211> 20

<212> PRT

<213> Homo sapiens

<400> 178
Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Leu Gly Ala Leu Leu Gly
1 5 10 15

Thr Ala Trp Ala
20

<210> 179

<211> 18

<212> PRT

<213> Homo sapiens

<400> 179
Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Leu Gly Ala Leu Leu Gly
1 5 10 15

Thr Ala

<210> 180

<211> 16

<212> PRT

<213> Homo sapiens

<400> 180
Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Leu Gly Ala Leu Leu Gly
1 5 10 15

<210> 181

<211> 24

<212> PRT

<213> Homo sapiens

<400> 181
Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu
1 5 10 15

Ala Ala Ala Ala Leu Ala Glu Gly
20

<210> 182
<211> 19
<212> PRT
<213> Homo sapiens

<400> 182
Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu
1 5 10 15

Ala Ala Ala

<210> 183
<211> 22
<212> PRT
<213> Homo sapiens

<400> 183
Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu
1 5 10 15

Ala Ala Ala Ala Leu Ala
20

<210> 184
<211> 20
<212> PRT
<213> Homo sapiens

<400> 184
Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu
1 5 10 15

Ala Ala Ala Ala
20

<210> 185
<211> 26
<212> PRT
<213> Homo sapiens

<400> 185
Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu
1 5 10 15

Ala Ala Ala Ala Leu Ala Glu Gly Asp Ala
20 25

<210> 186
<211> 21
<212> PRT
<213> Homo sapiens

<400> 186
 Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu
 1 5 10 15

Ala Ala Ala Ala Leu
 20

<210> 187
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 187
 Met Ser Leu Gly Gln Ser Ala Cys Leu Phe Leu Ser Ile Ala Arg Ser
 1 5 10 15

Arg Ser

<210> 188
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 188
 Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala
 1 5 10 15

Val Pro

<210> 189
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 189
 Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala
 1 5 10 15

Val Pro Thr

<210> 190
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 190
 Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala
 1 5 10 15

Val Pro Thr Ala Pro Ala
 20

<210> 191
<211> 16
<212> PRT
<213> Homo sapiens

<400> 191
Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Ala Ala Ala
1 5 10 15

<210> 192
<211> 21
<212> PRT
<213> Homo sapiens

<400> 192
Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Ala Ala Ala
1 5 10 15

Val Pro Thr Ala Pro
20

<210> 193
<211> 26
<212> PRT
<213> Homo sapiens

<400> 193
Met Ser Ala Ser Lys Ile Pro Leu Phe Lys Met Lys Asp Leu Ile Leu
1 5 10 15
Ile Leu Cys Leu Leu Glu Met Ser Phe Ala
20 25

<210> 194
<211> 28
<212> PRT
<213> Homo sapiens

<400> 194
Met Ser Ala Ser Lys Ile Pro Leu Phe Lys Met Lys Asp Leu Ile Leu
1 5 10 15
Ile Leu Cys Leu Leu Glu Met Ser Phe Ala Val Pro
20 25

<210> 195
<211> 18
<212> PRT
<213> Homo sapiens

<400> 195
 Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Ser Met Gly
 1 5 10 15

Gly Thr

<210> 196
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 196
 Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly
 1 5 10 15

Gly Thr Trp Ala
 20

<210> 197
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 197
 Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly
 1 5 10 15

<210> 198
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 198
 Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu
 1 5 10 15

Trp Ala

<210> 199
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 199
 Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu
 1 5 10 15

Trp Ala Phe Cys
 20

<210> 200

<211> 26

<212> PRT

<213> Homo sapiens

<400> 200

Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu
1 5 10 15Trp Ala Phe Cys Ala Pro Gly Ala Arg Ala
20 25

<210> 201

<211> 23

<212> PRT

<213> Homo sapiens

<400> 201

Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu
1 5 10 15Trp Ala Phe Cys Ala Pro Gly
20

<210> 202

<211> 13

<212> PRT

<213> Homo sapiens

<400> 202

Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro
1 5 10

<210> 203

<211> 16

<212> PRT

<213> Homo sapiens

<400> 203

Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro Thr Trp Ala
1 5 10 15

<210> 204

<211> 14

<212> PRT

<213> Homo sapiens

<400> 204

Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro Thr
1 5 10

<210> 205
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 205
 Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro Thr Trp Ala
 1 5 10 15

Gly

<210> 206
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 206
 Met Glu Ala Ala Pro Ser Arg Phe Met Phe Leu Leu Phe Leu Leu Thr
 1 5 10 15

Cys Glu Leu Ala Ala Glu Val Ala Ala
 20 25

<210> 207
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 207
 Met Glu Ala Ala Pro Ser Arg Phe Met Phe Leu Leu Phe Leu Leu Thr
 1 5 10 15

Cys Glu Leu Ala Ala
 20

<210> 208
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 208
 Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr Ser
 1 5 10 15

Val Ser

<210> 209
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 209
 Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr Ser
 1 5 10 15

<210> 210
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 210
 Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr
 1 5 10 15

<210> 211
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 211
 Met Gly Pro Val Arg Leu Gly Ile Leu Leu Phe Leu Phe Leu Ala Val
 1 5 10 15

His Glu Ala Trp Ala
 20

<210> 212
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 212
 Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu
 1 5 10 15

Leu Cys Ala His Val Val Thr Leu Leu Val Arg Ala Thr
 20 25

<210> 213
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 213
 Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu
 1 5 10 15

Leu Cys Ala His Val Val Thr Leu
 20

<210> 214
 <211> 28
 <212> PRT
 <213> Homo sapiens

<400> 214
 Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu
 1 5 10 15

Leu Cys Ala His Val Val Thr Leu Leu Val Arg Ala
 20 25

<210> 215

<211> 23

<212> PRT

<213> Homo sapiens

<400> 215
 Met Glu Ile Cys Arg Gly Leu Arg Ser His Leu Ile Thr Leu Leu Leu
 1 5 10 15

Phe Leu Phe His Ser Glu Thr
 20

<210> 216

<211> 25

<212> PRT

<213> Homo sapiens

<400> 216
 Met Glu Ile Cys Arg Gly Leu Arg Ser His Leu Ile Thr Leu Leu Leu
 1 5 10 15

Phe Leu Phe His Ser Glu Thr Ile Cys
 20 25

<210> 217

<211> 32

<212> PRT

<213> Homo sapiens

<400> 217
 Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val
 1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Gly Val Pro Pro Arg Ser
 20 25 30

<210> 218

<211> 34

<212> PRT

<213> Homo sapiens

<400> 218
 Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val
 1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Gly Val Pro Pro Arg Ser
 20 25 30

Leu Ala

<210> 219
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 219
 Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val
 1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Gly Val Pro
 20 25

<210> 220
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 220
 Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val
 1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Gly Val Pro Pro
 20 25 30

<210> 221
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 221
 Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val
 1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Gly
 20 25

<210> 222
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 222
 Met Trp Cys Ala Ser Pro Val Ala Val Val Ala Phe Cys Ala Gly Leu
 1 5 10 15

Leu Val Ser His Pro Val Leu Thr Gln Gly
 20 25

<210> 223
<211> 24
<212> PRT
<213> Homo sapiens

<400> 223
Met Trp Cys Ala Ser Pro Val Ala Val Val Ala Phe Cys Ala Gly Leu
1 5 10 15
Leu Val Ser His Pro Val Leu Thr
20

<210> 224
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 224
aacgagctga agcagatgtat tttg 24

<210> 225
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 225
tttagccaact aaaaaggccc cga 23

<210> 226
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 226
gcccaactaaa aaggccccga a 21

<210> 227
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 227
 attttgagaa cctctgagga aac

23

<210> 228
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 228
 gtgagagaaa gaggtcctca ga

22

<210> 229
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 229
 ccacccacca ccaccaatg

19

<210> 230
 <211> 34
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 230
 ggtgacacta tagaactcac ctatctcccc aaca

34

<210> 231
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 primer

<400> 231
gggccccctgg aacagaacctt c

21

<210> 232
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
primer

<400> 232
gcgttagcatt taggtgacac t

21

<210> 233
<211> 168
<212> PRT
<213> Homo sapiens

<400> 233
Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly Thr
5 10 15
Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu Lys
20 25 30
Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly His
35 40 45
Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile His
50 55 60
Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln
65 70 75 80
Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln Tyr
85 90 95
Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys Ser
100 105 110
Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr Ser
115 120 125
Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile Phe
130 135 140
Val Ser Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala Ser
145 150 155 160
Phe Phe Gly Ala Phe Leu Val Gly
165

<210> 234
<211> 84
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 234
gcccacca tgaagacctg ctggaaaatt ccagtttct tctttgttg cagtttccctg 60
gaaccctggg catctgcaga attc 84

<210> 235
<211> 123
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 235
ggatccctgg ttccgcgtgg ctcaggctca ttcaaggta agcctatccc taaccctctc 60
ctcggtctcg attctacgcg taccggatcat catcaccatc accatcacca tggaggacag 120
tga 123

<210> 236
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
6xHis tag

<400> 236
His His His His His His
1 5

<210> 237
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
8xHis tag

<400> 237
His His His His His His His
1 5